Date: Wednesday, 3/8/2006 10:38:29 AM
User: Kim Johnston

# Process Sheet

| | | | |
|---|---|---|---|
| **Customer** | : CU-DAR001 Dart Helicopters Services | **Drawing Name** | : INLET VALVE SHAFT |
| **Job Number** | : 26122 | | |
| **Estimate Number** | : 12250 | | |
| **P.O. Number** | : N/A | **Part Number** | : D34743 |
| **This Issue** | : 3/8/2006 **S.O. No.** : N/A | **Drawing Number** | : D3474 REV.A |
| **Prsht Rev.** | : NC | **Project Number** | : N/A |
| **First Issue** | : N/A **Type** : MACHINED PARTS | **Drawing Revision** | : A |
| **Previous Run** | : N/A | **Material** | : N/A |
| **Written By** | : SEE COMMENT BELOW | **Due Date** | : 3/31/2006 **Qty:** 10 **Um:** Each |
| **Checked & Approved By** | : 06.03.08 | | |
| **Comment** | : est rev. A 06.02.07 New issue EC | | |

**Additional Product**

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 1.0 | OUTSIDE SERVICE | OUTSIDE SERVICES |

**Comment:** Sub-Contracting OUTSIDE SERVICES
Issue P/O: 00000768 06/03/09
Email or Ship DXF file to vendor
Laser Cut per Dwg D3474 flat pattern D3474-3F 06/03/09
Material release note required

| | | |
|---|---|---|
| 2.0 | D34743F | Arm |

**Comment:** Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)
ARM

| | | |
|---|---|---|
| 3.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |

**Comment:** PACKAGING RESOURCE #1
Receive & Inspect For Transit Damage
Ensure material certification is attached
06/3/27 (10)

| | | |
|---|---|---|
| 4.0 | QC6 | DIMENSIONAL CHECK |

**Comment:** DIMENSIONAL CHECK
06.03.28 (10)

| | | |
|---|---|---|
| 5.0 | SMALL FAB 1 | SMALL & MEDIUM FAB RESOURCE 1 |

**Comment:** SMALL & MEDIUM FAB RESOURCE 1
Deburr if necessary.
SMD 06:03:29 (10)

**Dart Aerospace Ltd**

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| **DATE** | **STEP** | **PROCEDURE CHANGE** | **By** | **Date** | **Qty** | **Approval** Chief Eng / Prod Mgr | **Approval** QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes (No) **DQA:** ___ **Date:** 06/03/30

**QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DATE** | **STEP** | **Description of NC** Section A | **Corrective Action** Section B | | | **Verification** Section C | **Approval** Chief Eng | **Approval** QC Inspector |
| | | | **Initial** Chief Eng | **Action Description** Chief Eng | **Sign & Date** | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

**NOTE:** Date & initial all entries

Date: Wednesday, 3/8/2006 10:38:30 AM
User: Kim Johnston

# Process Sheet

**Customer:** CU-DAR001 Dart Helicopters Services **Drawing Name:** INLET VALVE SHAFT

**Job Number:** 26122 **Part Number:** D34743

Job Number:

| Seq. #: | Machine Or Operation: | Description : |
|---|---|---|
| 6.0 | QC5 | INSPECT WORK TO CURRENT STEP |
| | **Comment:** INSPECT WORK TO CURRENT STEP | 06-03-29 (10) |
| 7.0 | PACKAGING 1 | PACKAGING RESOURCE #1 |
| | **Comment:** PACKAGING RESOURCE #1<br>Identify and Stock<br>Location: ST439 | 06/03/29 (10) |
| 8.0 | DC | DOCUMENT CONTROL |
| | **Comment:** DOCUMENT CONTROL<br>Inspection Level 21 | 06/03/30 (10) |

Job Completion

06/03/29



Form: rprocess

**Dart Aerospace Ltd**

| W/O: | | WORK ORDER CHANGES | | | | | |
|---|---|---|---|---|---|---|---|
| **DATE** | **STEP** | **PROCEDURE CHANGE** | **By** | **Date** | **Qty** | **Approval** Chief Eng / Prod Mgr | **Approval** QC Inspector |
| | | | | | | | |
| | | | | | | | |

**Part No:** _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

**QA: N/C Closed:** _____ **Date:** _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **DATE** | **STEP** | **Description of NC** Section A | **Corrective Action** Section B | | | **Verification** Section C | **Approval** Chief Eng | **Approval** QC Inspector |
| | | | **Initial** Chief Eng | **Action Description** Chief Eng | **Sign & Date** | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

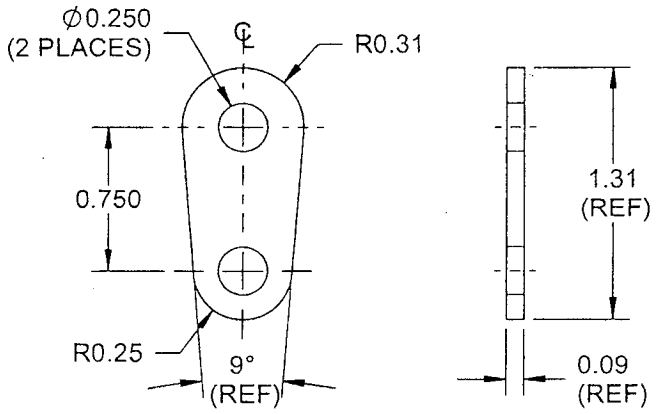
**NOTE:** Date & initial all entries

PRELIMINARY ISSUE

| DESIGN | DRAWN BY | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA | |
|---|---|---|---|
| CHECKED | APPROVED | DRAWING NO.<br>D3474 | REV. A<br>SHEET 3 OF 4 |
| DATE<br>03.01.23 | | TITLE<br>INLET VALVE SHAFT | SCALE<br>1:1 |

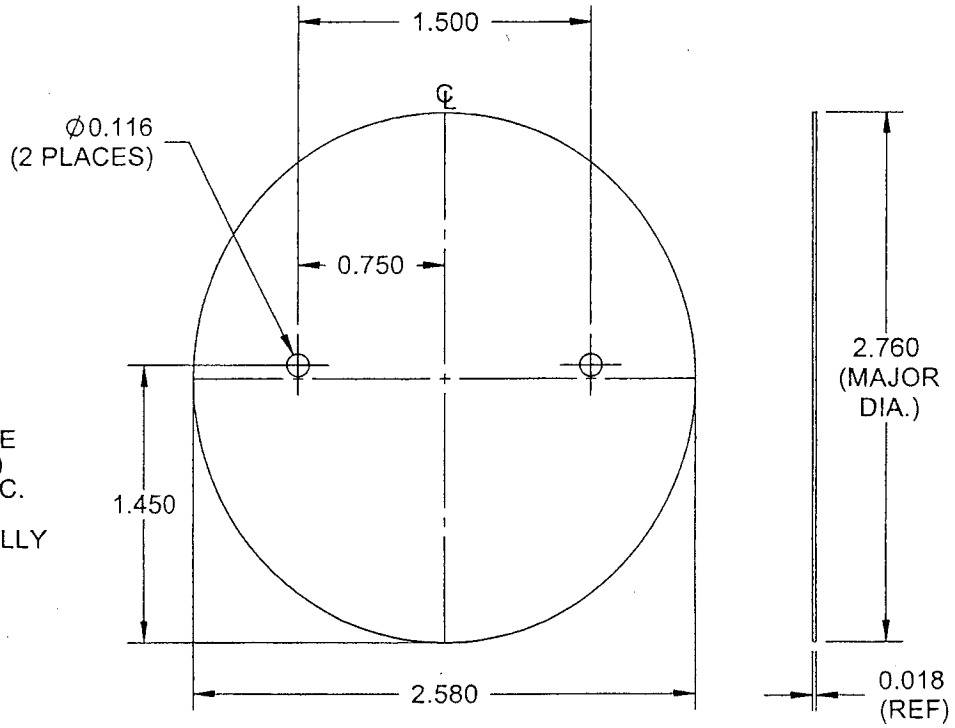
## D3474-3 ARM FLAT PATTERN

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 13 GAUGE SS (0.090 THICK) (REF. DART SPEC. M304S26GA)
2) FINISH: NONE.




## D3474-5 PLATE VALVE FLAT PATTERN

1) MATERIAL: AISI 304/316 SS SHEET PER MIL-S-5019 (ANNEALED) 2B FINISH 26 GAUGE SS (0.018 THICK) (REF. DART SPEC. M304S26GA)
2) FINISH: ELECTRO CHEMICALLY POLISHED.




**NOTES:**

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES
5) BREAK ALL SHARP EDGES 0.005 TO 0.010

FAX 1 847 585 2500

CORUS ALUMINIUM

Corus Aluminium Walzprodukte G... 1
Postfach 100331 · D-56033 Koblenz

corus

INSPECTION CERTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA

PAGE: 2 / 03

NO.: 0879231 SERIAL-NO.:

PURCHASER: CORUS ALUMINIUM ROLLED PRODUCTS USA-A DIVIS SCHAUMBURG, IL 60173

ORDER NO. PURCH.: US-AIRCR.DEPOT-PRO
ORDER NO. MAN.: 83415
SPEC.: AMS4041+B209+QQ230/5
CUSTOMER PART NO.:

ITEM: 01 LOT: 102973 QUANTITY: 344

ALLOY/TEMPER: 2024 T3 ALCLAD 1230 PRODUCT: PLA
DIMENSIONS: 0.040 x 48.00 x 144.00 INS

Other tests:

| | |
|---|---|
| Dimensional check: | OK |
| Surface control: | OK |

Normative references:

BESTELLNORM/SPECIFICATION/NORME
AMS 4041P+ASTM B 209-04+AMS-QQ-A-250/5A SEP1998

Bend test:

L-direction LT-direction OK ST-direction

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INSPECTION CERTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA



NO.: 0879231 SERIAL-NO.:
ORDER NO. PURCH.: US-AIRCR. DEPOT-PRO
PURCHASER: CORUS ALUMINIUM ROLLED PRODUCTS USA-A DIVIS SCHAUMBURG, IL 60173
ORDER NO. MAN.: 83415
SPEC.: AMS4041+BZ09+QQ250/5
CUSTOMER PART NO.:

Remarks:

CERTIFIED THAT THE WHOLE OF THE SUPPLIES DETAILED HEREON HAVE BEEN INSPECTED, TESTED AND, UNLESS OTHERWISE STATED ABOVE, CONFORM IN ALL RESPECTS WITH THE REQUIREMENTS OF THE SPECIFICATION, CONTRACT OR ORDER.

Enclosures:

Koblenz, the 28.08.05 SW

G. Mettler
Quality assurance

Corus Aluminium
Walzprodukte GmbH
Koblenz

P/N 062310 PO W23357

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corus

## INSPECTION CERTIFICATE (EN 10204/3.1) / TEST REPORT / APPROVED CERTIFICA

NO.: 0879231 SERIAL-NO.: PAGE: 1 / 03

PURCHASER: CORUS ALUMINIUM ROLLED PRODUCTS USA-A DIVIS SCHAUMBURG, IL 60173

ORDER NO. PURCH.: US-AIRCR.DEPOT-PRO
ORDER NO. MAN.: 83415
SPEC.: AMS4041+B209+QQ250/5
CUSTOMER PART NO.:

ITEM: 01 LOT: 102973
QUANTITY: 344

ALLOY/TEMPER: 2024 T3 ALCLAD 1230 PRODUCT: PLA
DIMENSIONS: 0.040 x 48.00 x 144.00 INS

RESULTS:

Mechanical properties:

| Spec. No. | Y.S. KSI | U.T.S. KSI | El. % |
|---|---|---|---|
| Min. LT: | 39,0 | 59,0 | 15,0 |
| Max. LT: | | | |
| 001 | 40,6 | 59,6 | 17,9 |
| 002 | 40,6 | 59,8 | 18,7 |
| 003 | 40,5 | 59,8 | 17,7 |
| 004 | 40,8 | 59,6 | 18,1 |

Chemical composition: in % , remainder Al

| ALLOY: | ALLOY CORE 2024 | ALLOY LINER 1230 4 | ALLOY LINER 1230 4 |
|---|---|---|---|
| CAST-NO. | 5-05-2914 | 142166-1 | 142166-1 |
| Si | 0,028 | 0,12 | 0,12 |
| Fe | 0,123 | 0,26 | 0,26 |
| Cu | 4,526 | 0,002 | 0,002 |
| Mn | 0,634 | 0,010 | 0,010 |
| Mg | 1,436 | 0,003 | 0,003 |
| Cr | 0,001 | 0,001 | 0,001 |
| Zn | 0,011 | 0,005 | 0,005 |
| Ti | 0,0278 | 0,019 | 0,019 |
| B | 0,0006 | 0,002 | 0,002 |
| Zr | 0,0006 | | |
| Pb | 0,0016 | 0,0011 | 0,0011 |
| Ni | 0,0059 | | |